

Commonwealth of Kentucky
Division for Air Quality
EXECUTIVE SUMMARY

PROPOSED
TITLE V OPERATING, NO. V-07-032
SGL CARBON, LLC
HICKMAN KY.
FEBRUARY 19, 2008
LUIS D. FUENTES, REVIEWER

SOURCE ID:	021-075-00001
AGENCY INTEREST:	1440
ACTIVITY:	APE20070001

SOURCE DESCRIPTION:

SGL Carbon, LLC, hereafter “SGL Carbon”, located in Hickman, Kentucky, is a graphite electrode manufacturing facility. This operation is classified under the Kentucky Division for Air Quality (DAQ) proposed regulation 401 KAR Chapter 52 as a “major source” of air emissions. Currently, SGL Carbon is operating in accordance with Title V Permit V-01-023 R2 issued July 27, 2007.

The primary activity of SGL Carbon’s Hickman, Kentucky plant is the manufacturing of carbon graphite electrodes. This process consists of milling, mixing and extruding petroleum coke to make green electrodes that are then shipped to outside plants for completion.

The raw material petroleum coke is weighed, sized, and pneumatically conveyed to a mixer/cooler pre-heater where it is heated and dropped into the mixer and homogenized. Liquid coal tar pitch and other additives are added to the mixer and blended until the desired target temperature is reached. Once temperature has been attained, a predetermined amount of water is added to reduce the hot mix to the desired extrusion temperature. After water addition, the cooled mix is then dropped to a press to be extruded. The finished carbon graphite electrodes are then ready to be shipped to other facilities for further processing.

In addition to producing green electrodes, a ring bake furnace at the plant allows the facility to bake the green electrodes on site. Following ring furnace baking, the baked electrodes are then cleaned and shipped to other sites for use.

PUBLIC AND AFFECTED STATE REVIEW:

Affected states (Tennessee and Missouri) were notified of the issuance of the draft permit on August 28, 2007 via e-mail. On September 5, 2007, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *The Fulton Leader* in Hickman, Kentucky. The public comment period expired 30 days from the date of publication.

No comments were received during this period. The final determination of this Division is that the proposed operation will comply with all air quality regulations and requirements. The permit is now being issued as proposed. A final permit will be issued after the U.S. EPA’s 45-day review.